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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,628	06/30/2004	Maya Benson	CE31103P	2975
22917	7590	06/22/2005	EXAMINER	
MOTOROLA, INC. 1303 EAST ALGONQUIN ROAD IL01/3RD SCHAUMBURG, IL 60196			LAM, DUNG LE	
			ART UNIT	PAPER NUMBER
			2687	

DATE MAILED: 06/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/500,628

Applicant(s)

BENSON ET AL.

Examiner

Dung Lam

Art Unit

2687

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>6/30/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)–(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The references listed in the Information Disclosure Statement filed on February 11, 2003 have been considered by the examiner (see attached PTO-1449 form or PTO/SB/08A and 08B forms.)

Claim Objections

3. Claim 15 is objected to because of the following informality: the word “**method** comprising ” should be changed to “**apparatus** comprising”. Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim **1-9,11, 13-34** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Almgren et al.** (WO Publication No. 97/32445) in view of **ETSI TR 125 922 v3.4.0 2000-12** (simply denoted as “**3GPP2000**”).

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6. Regarding **claim 1**, Almgren teaches method of selecting carriers to be measured by a subscriber unit served by a cellular communication system and operable to measure carriers in a frequency band (Abstract), the method comprising the steps of

Almgren teaches a step of selecting a subset of carriers in the frequency band (plurality of DCCH channels of cells which comprise the neighbor cell list, Col. 15, line 26-30) to be measured by the subscriber unit in response to the measuring performance characteristic (Col. 9, line 17-20).

However, Almgren fails to teach the step of determining a measuring performance characteristic of the subscriber unit related to the measurement performance of the subscriber unit when measuring carriers in the frequency band. In an analogous art, 3GPP2000 discloses that the measurement configuration is based on previously measure UE capability information such as supported modes (page 16, last two lines, the measurement configuration to be used based upon received UE capability information). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to combine Almgren teachings of measuring the carriers based on the performance capability of the UE as taught by 3GPPP to provide the most efficient and accurate measurement results.

7. Regarding **claim 2**, Almgren and 3GPP2000 teach all the limitations of claim 1 (see claim 1 above). Almgren further teaches the step of transmitting identification of the subset of carriers to the subscriber unit (neighbor cell list transmitted to the mobile station, Col. 16, line 5-8).

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8. Regarding **claim 3**, Almgren and 3GPP2000 teach all the limitations of claim 1 (see claim 1 above). Almgren further teaches the step of the subscriber unit measuring the carriers of the subset of carriers (Col. 16, lines 9-11).

9. Regarding **claim 4**, Almgren and 3GPP2000 teach all the limitations of claim 1 (see claim 1 above). 3GPP2000 further teaches that the performance characteristics is indicative of the time required for the subscriber unit to measure carriers in the frequency band (the number of intra-frequency cells which a mobile station capable of measuring depends on the time available to perform these measurements, page 18 section 5.1.6.1).

10. Regarding **claim 5**, Almgren and 3GPP2000 teach all the limitations of claim 1 (see claim 1 above). 3GPP2000 further teaches the measuring performance characteristic is indicative of the number of receivers in the subscriber unit (A UE can do measurements in Compressed Mode if it has only one receiver. Alternatively, the receiver need not use Compressed Mode to perform measurements when it has a dual receiver, Page 14, Section 5.1.5.1 and page 16 last two lines).

11. Regarding **claim 6**, Almgren and 3GPP2000 teach all the limitations of claim 1 (see claim 1 above). 3GPP2000 further teaches the frequency band is a frequency band of a second communication system (In a Handover from 3G to 2G, inter-system needs to notify the UE of the existing GSM frequencies in the area, Page 14, section 5.1.5.1).

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12. Regarding **claim 7**, Almgren and 3GPP2000 teach all the limitations of claim 1 (see claim 1 above). 3GPP2000 further teaches the cellular communication system and the second communication system use different radio access technologies (Inter Radio Access Technology Handover, Page 14, Title of Section 5.1.5).

13. Regarding **claim 8**, Almgren and 3GPP2000 teach all the limitations of claim 7 (see claim 7 above). 3GPP2000 further teaches the cellular communication system is a GSM communication system (**2G**) and the second communication system is a UMTS (**3G**) communication system (Page 14, section 5.1.5.2).

14. Regarding **claim 9**, Almgren and 3GPP2000 teach all the limitations of claim 7 (see claim 7 above). 3GPP2000 further teaches the communication system is a UMTS communication system and the second communication system is a GSM communication system (Handover 3G to 2G, page 14, section 5.1.5.1).

15. Regarding **claim 13**, Almgren and 3GPP2000 teach all the limitations of claim 1 (see claim 1 above). Almgren further teaches the step of determining a handover candidate carrier from the subset of carriers (a method and system of this type would allow creation of a neighbor cell list that would contain the best possible candidate cells for handoff of a call, Col.7 line 18-20).

Regarding **claim 14**, Almgren and 3GPP2000 teach all the limitations of claim 1 (see claim 1 above). Although they fail to teach specifically that the performance characteristic is determined from the number of measurement reports reported from the subscriber unit within a given time interval, 3GPP2000 teaches that the number of cells

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which can be reported by the UE depends on the characteristics of the activated compressed mode patterns (Page 18, section 5.1.6). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to derive the performance characteristic (single or dual mode receiver) based on the number of the reports to select a re pertinent set of carriers to be measured.

16. Regarding claims **15 through 25**, they are apparatus claims corresponding to the above method claims of 1, 2, 4, 5, 6, 7, 8, 9, 10,13 and 14 respectively. Therefore, they are rejected for the same reasons as claims 1, 2, 4, 5, 6, 7, 8, 9, 10,13 and 14 respectively (see claims 1, 2, 4, 5, 6, 7, 8, 9, 10,13 and 14).

17. Regarding claims **27**, it teaches a subscriber unit that have the limitations corresponding to the above combined method claims of 1 and 3. Therefore, they are rejected for the same reasons as claims 1 and 3 (see claim 1 and 3 above).

18. Regarding claims **28-33, and 34**, they are claims relating to a subscriber unit that corresponds to the above method claims of 4-9 and 13. Therefore, they are rejected for the same reasons as claims 4-9 and 13 respectively.

19. Claims **10 and 12** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Almgren et al.** (WO Publication No. 97/32445) in view of **ETSI TR 125 922 v3.4.0 2000-12** (simply denoted as "**3GPP2000**") and further in view of **Lupien** (US Patent No. 5857153).

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20. Regarding **claim 10**, Almgren and 3GPP2000 teach all the limitations of claim 7 (see claim 7 above). However, they fail to teach that the size of the subset of carriers is dependent on the performance characteristic. In an analogous art, Lupien teaches that when a dual-band capable receive a neighbor list of both 800 and 1900 MHz while the mobile stations that only operates at the 800MHz receives only neighbor cells operating at 800MHz (Col. 6, lines 49-55). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made add the feature of measuring only the frequencies that the UE is capable of measuring to ensure high accuracy for handoff.

21. Regarding **claim 12**, Almgren and 3GPP2000 teach all the limitations of claim 1 (see claim 1 above). Lupien further teaches the limitations wherein the subset of carriers is an ordered subset of carriers and the order of carriers in the subset of carriers is dependent on the performance characteristic (neighbor cells indicated in a measurement order from the base station, Col. 6, lines 45-47).

Citation of Prior Art

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Marjelund et al. (US Publication Number 2002/0071480) discloses a method of communicating functionality capability of a terminal to the network for performance optimization.

Tigerstedt et al. (US Publication Number 2002/0187784) discloses a method of triggering IS handover between two WCDMA carrier.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung Lam whose telephone number is (571) 272-6497. The examiner can normally be reached on M-F 8 - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DL


6/13/05
LESTER G. KINCAID
PRIMARY EXAMINER